



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,150	08/10/2001	Thiam Wah Loh	70003175-1	3987

7590 04/06/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

TRUJILLO, JAMES K

ART UNIT	PAPER NUMBER
----------	--------------

2116

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,150

Applicant(s)

LOH ET AL.

Examiner

James K. Trujillo

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment dated 1/25/05.
2. Claims 1-8 are presented for examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dayan, U.S. Patent 5,230,052.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamori in view of Dayan.

Art Unit: 2116

7. The rejections with respect to claims 6 and 7-8 are respectfully maintained and reproduced infra for applicant's convenience.

8. As to claim 6, Dayan taught a boot-up process for booting a processing device, wherein an agent is saved in a read only memory, wherein the agent code contains a first agent record identification code (inherent because the agent record of Dayan must locate and call the agent record [an appropriate BIOS]). Dayan further teaches wherein a plurality of agent records each containing a second agent record identification code (a list of devices from which the local system will attempt to procure a BIOS and autoconfiguration instructions; col. 6 lines 22-28), a register identification code and data is saved in an erasable and programmable memory device (agent record is stored on a hard disk; a hard disk is an erasable and programmable memory device; col. 6 lines 29-47). Dayan also teaches and wherein the boot-up process comprises the following steps:

- a. initializing a plurality of registers (initialize the local computer) in the processing device (col. 6 lines 3-14 and col. 7 lines 15-20);
- b. reading the plurality of agent records and checking as to whether a match between a second agent record identification code and the first agent record identification code exists (discover a path to a remote computer system from a plurality of devices; col. 6 lines 10-11 and col. 6 lines 22-28);
- c. for the case that a match is found to exist (a boot image is found according to the data in the local ROM; col. 6 lines 10-11), assigning the data of the matching agent record to a specified register according to the register identification code of the matching agent record (as part of the booting process; and col. 7 lines 15-33);

Art Unit: 2116

9. As to claim 7, Dayan taught the claimed boot-up process therefore he also taught the claimed method and the claimed electronic device.

10. As to claims 7-8, Tamori teaches a method for executing an agent code, wherein an agent record containing data is saved in an erasable and programmable memory device, and wherein the method comprises the following steps:

- a. reading the agent code (data which is first read into the memory when the processor is started up) from the read only memory and loading it into a processing device (col. 6 lines 8-10);
- b. executing the agent code, thereby initiating reading the agent record from the erasable and programmable memory device and loading it into the processing device (BIOS in flash ROM portion 91a; col. 5 lines 30-38 and col. 5 lines 49-52); and
- c. executing the agent record in the processing device (col. 6 lines 18-31).

Specifically, Tamori teaches reading the agent code used when a processor is started up and is thus loaded into the processor. The agent code is stored in a memory location that cannot be rewritten. Tamori's agent code executed causing the agent record (updateable BIOS) to be loaded into the processor and subsequently executed.

Tamori does not expressly teach wherein the agent code is saved in a read only memory. However, Tamori discloses that his agent code is stored in a location of flash memory that cannot be rewritten.

Dayan teaches agent code (minimal portion of BIOS code) that is stored in a read only memory (col. 6 lines 3-14). Like Tamori, Dayan teaches a computer system that uses agent code to read an agent record (the remainder of BIOS). Further, Dayan would suggest to those of ordinary skill that the ROM is used for the agent code to prevent the agent code from being overwritten, thus protecting the agent code.

It would have been obvious to those of ordinary skill in the art having the teachings of Tamori and Dayan before him at the time the invention was made to modify the agent code of Tamori by storing in a read only memory as taught by Dayan in order to prevent the agent code from being overwritten. Further, Tamori suggests that the region where the agent code is stored should not be overwritten.

11. Regarding claim 8, Tamori together with Dayan taught the electronic device according to claim 7, described above. Tamori further teaches wherein the processing device is realized by a central processing unit of a computer device (col. 1 lines 43-46), wherein the agent code is realized by an operating system for the computer device, wherein the agent record contains instructions and data, and wherein executing both, the agent code and the agent record is realized by a boot-up process of the computer device (col. 5 lines 30-38).

12. The rejections with respect to claims to amended claims 1-5 are provided below.

13. Regarding claim 1, Dayan teaches a method for executing an agent code (minimal portion of the BIOS, col. 6, lines 3-14), wherein the agent code is saved in a read only memory (ROM 21), wherein an agent record containing data is saved in an erasable programmable memory device (DASD, col. 6, lines 44-47) and wherein the method comprises:

Art Unit: 2116

- a. initializing a plurality of registers (necessary in order to initialize the local computer, col. 6, lines 3-14 and col. 7, lines 15-20);
 - b. reading the agent code from the read only memory and loading it into a processing device (data which is first read into the memory when the processor is started up, col. 6, lines 8-10);
 - c. executing the agent code wherein the agent code includes an agent record identification code (identification is necessary in order to call an appropriate agent record “BIOS”, col. 10, lines 9-14), which includes a register identification code (in order to places the minimal portion of the BIOS at an address in the processing device, col. 8 lines 28-43), thereby initiating reading the agent record with a matching agent record identification from the erasable programmable memory device (the agent record is called to the processing device from the remote storage, col. 10, lines 9-14) and loading it into the register of the processing device that is identified by the register identification code of the read agent record (the execute addresses are transmitted for the BIOS to follow, wherein the execute addresses are the register identification code and supercedes the previous BIOS at the same execution address, col. 7, line 63-col. 8, line 6 and col. 8 lines 28-43), and
 - d. executing the agent record in the processing device (the agent record “new BIOS” is loaded in the processing device, col. 6, lines 9-19).
14. Regarding claim 2, Dayan taught the method according to claim 1, as described above. Dayan further teaches wherein executing the agent record (BIOS image) containing instructions and data is performed is performed by adding the data of the agent record to a specified register

(address space previously occupied by the ROM-BIOS) of the processing device according to the instructions of the agent record (col. 8, lines 28-43).

15. Regarding claim 3, Dayan taught the method according to claim 1, as described above. Dayan further teaches wherein the processing device is realized by a central processing unit part of a computer device, wherein the agent code is realized by an operating system for the computer device, wherein the agent record contains instruction and data, and wherein executing both, the agent code and the agent record, is realized by a boot-up process of the computer device (col. 5, lines 2-22, col. 7, lines 43-53 and col. 8, lines 39-43).

16. Regarding claim 4, Dayan taught the method according to claim 4 as described above. Dayan further teaches wherein the data of the agent record correct at least one sequence in a specified register (in order to achieve modification and maintain compatibility) of the computer device according to the instructions of the agent record (col. 2, lines 33-41). Specifically, Dayan teaches that his agent record will allow for modification and compatibility to be maintained for the computer device. Those of ordinary skill in the art will understand that allowing modification and maintaining compatibility it is necessary for correction the agent record to provide corrections.

17. Regarding claim 5, Dayan taught the method according to claim 3, as described above. Dayan further teaches wherein the data of the agent record add at least one sequence to a specified register of the computer device according to the instructions of the agent record (the new BIOS now supercedes the previous BIOS, col. 8, lines 28-47).

Response to Arguments

Art Unit: 2116

18. Applicant's arguments filed 25 January 2005 have been fully considered but they are not persuasive.

19. All rejections of claim limitations as filed prior to Amendment dated 25 January 2005 not argued in their entirety or substantively in the response to the prior Office action have been conceded by Applicant and the rejections are maintained from henceforth.

20. Applicant argues in substance that Dayan does not teach, suggest or hint at the *use of an agent code and agent record* in a boot up process *to update a specified register of a processing device*, wherein the boot up process comprises assigning data of the an agent record whose agent record identification code matches that of the agent code being executed, to a *specified register identified by the register identification code of the matching agent record* [emphasis added].

In response to applicant's argument that Dayan does not teach, suggest or hint use of an agent code and agent record. The examiner disagrees. Dayan teaches a minimal portion of BIOS, which is interpreted to be an agent code of Dayan. As set forth in the rejection of claims 1 and 6, the agent code of Dayan is executed and uses an agent record identification code, which includes a register identification code and is therefore agent code.

The claimed invention does not recite features which the applicants argue the references fail to show. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*update to a specified register of a processing device and wherein the boot up process comprises assigning data of the agent record whose agent record matches that of the agent record being executed to a specified register identified by the register identification code of the matching agent record*") are not recited in the rejected claim(s). Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that Dayan does not teach, suggest or hint assigning the data of the matching agent record to a specified register identified by the register identification code of the matching agent record. Applicants are further directed to col. 7, line 54 through col. 8, line 10 of Dayan which teaches assigning data of the matching agent record (master boot record, MBR code) to a specified register according to the register identification code of the matching agent record (starting address of the MBR code).

21. The applicants argue in substance that Tamori like Dayan does not teach, suggest, or hint at the use of an agent code and agent record. The examiner disagrees. Tamori, as per claim 7, teaches agent code (wherein the updating program of Tamori is the agent code and wherein the BIOS update code of Tamori is an agent record, figures 11-18 and corresponding text). Specifically, the agent code of Tamori is loaded in the processing device and the agent record is executed in the processing device (col. 7, lines 25-35).

22. Applicants also argue in substance that Tamori is different from the claimed invention in that the claimed invention defines that the agent code and the agent record are stored in different memory devices, namely the ROM and EPMD. However, as the claims do not distinguish that there are two memory *devices* [emphasis added]. The claims recite "read' only memory" and an "erasable programmable memory *device*". Thus, the claims do not recite that there are separate memory devices but a device and two areas of memory. Tamori has two different memory areas one area that is not able to written and one that can be overwritten both of which happen to be in the same device. Even if the claims did recite two memory devices the examiner would not

Art Unit: 2116

disagree with the applicants that Tamori does not have two different memory devices. That is why reference to Dayan is relied upon to teach that feature.

23. Applicant also argue is substance that the claimed method does not involve the use of RAM as both Dayan and Tamori would. However this feature is not claimed. The applicants use of the transition term “comprising”, which the applicant should be aware is an open-ended and covers the expressly recited subject matter, alone or in combination with unrecited subject matter. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “not making use of the RAM for temporary storage of the old and new agent record” and “wherein there are two separate memory devices”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2116

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (571) 272-3677. The examiner can normally be reached on M-F (7:30 am - 5:00 pm) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Trujillo
March 29, 2005


LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100